REMARKS

The Examiner has rejected Claims 1, 23, and 24 under 35 U.S.C. §102(b), based on the contention that they are anticipated by U.S. Patent No. 3,482,929, issued to Gentil (Gentil '929). Further, the Examiner has rejected Claims 26 and 27 under 35 U.S.C. §103(a) as being unpatentable over Gentil '929 in view of U.S. Patent No. 4,294,778, issued to DeLuca (DeLuca '778). Applicant respectfully traverses the Examiner's rejections. To better clarify the present invention, however, Applicant has amended Claim 1 to include the former limitations of Claim 26, and has added Claim 28 drawn to a preferred embodiment of the present invention. As will be discussed below, none of the references cited by the Examiner teach, disclose or suggest the present invention as claimed, either alone or in combination with any other prior art reference.

Claim 1 now specifies that the present device includes an emanator material positioned proximate the housing, and a means for increasing the evaporation of the released volatile substance from the emanator material, comprising means for increasing the circulation of air proximate at least one of the opening in the housing and the emanator material. This Claim represents the combined limitations of the original Claim 1 and the former Claim 26, which the Examiner contends was unpatentable over Gentil '929 in view of DeLuca '778. Gentil '929 and DeLuca '778, however, disclose completely different types of dispenser systems, which operate with different evaporative mechanisms such that one of ordinary skill in the art would never look to the teachings of DeLuca '778 to correct the deficiencies of Gentil '929.

Gentil '929 discloses a method and apparatus for evaporating volatile solutions, which includes a tube (a) filled with a volatile substance (b), wherein tube (a) is inverted

with an open und disposed adjacent the bottom of a tray (c) on which a support (d) for tube (a) is secured. The tray (c) bottom is lined with a porous material (e), which delivers fluid from the bottom area of the tube (a) to an adjacent cylinder (g) by capillary action. The cylinder (g) may then be heated by an electric bulb (h), helping to volatilize the fluid delivered in the porous material (e) to the cylinder (g).

Gentil '929 does not, however, show a means for increasing the evaporation of the released volatile substance, comprising means for increasing the circulation of air proximate at least one of the opening in the housing and the emanator material. The Examiner specifically acknowledged this fact in the Office Action mailed on January 21, 2003. Instead, the Examiner relies upon DeLuca '778 to remedy this deficiency. DeLuca '778 discloses an evaporative dispenser, which utilizes a motor (402) and fan assembly (404) to direct air flow downwardly through a housing, and over a reservoir (602) which contains a quantity of liquid material to be volatilized. The reservoir (602) includes a lid (614) over which the air from the fan assembly (404) passes. As the air passes over lid (614) it decreases the static pressure above the reservoir (602), (See DeLuca '778, Col. 8, Lines 15-17), thus pulling the evaporated liquid out of then enclosed reservoir (602) and out of lid (614). Thereafter, the air acts as a carrier gas, carrying the already-evaporated liquid out of the device. (See DeLuca '778, Col. 8, Lines 19-22).

As can be seen, DeLuca '778 operates in a completely different manner than Gentil '929. Gentil '929 delivers a volatile fluid by pure evaporation, relying upon heat to deliver a volatile fluid from a porous material. DeLuca '778, on the other hand, evaporates the fluid, and then delivers the fluid using blown air. The blown air in

DeLuca '778 is not utilized in the evaporation process, nor would it be obvious to use it for that purpose. The reservoir in DeLuca '778 is specifically covered up by a lid (614), preventing the direct contact of the air with the volatile fluid. Thus, the blown air is only utilized as a carrier gas, and not as a means to increase the evaporation of fluid.

Furthermore, the very structure of DeLuca '778 teaches away from blowing air on the fluid to increase the evaporation of the fluid. First, as noted above, the use of a lid (614) over the reservoir in DeLuca '778 prevents contact between the blown air and the surface of the liquid in the reservoir (602). Secondly, as is known to those of ordinary skill in the art, volatilization of fluids directly depends upon the exposed surface area of the fluid. Gentil '929 (as well as the present invention) implicitly acknowledged this fact through the use of a porous material to retain the fluid, which increases the exposed surface area of the fluid for evaporation. Not only does DeLuca '778 fail to expose the fluid to blown air, but the fluid is in liquid form, hence limiting the exposed surface area of the fluid. Further, the evaporative dispenser in DeLuca '778 is also "compact in construction," (DeLuca'778, Col. 2, line 19), thus further reducing the possible size of the exposed surface area of fluid.

From the above, Applicant submits that DeLuca '778 fails wholly to show means for increasing the evaporation of the released volatile substance from the emanator material, wherein the evaporation increasing means comprises means for increasing circulation of air proximate at least one of the opening in the housing and the emanator material, as claimed in current Claim 1. Furthermore, given the structure of DeLuca '778, it actually teaches away from directly evaporating fluid using the blow air, but instead teaches that the blown air should be used as a carrier gas for the already-

evaporated fluid. Therefore, DeLuca '778 fails to teach, disclose or suggest the present Claim 1 as amended, and therefore fails to remedy the deficiencies of Gentil '929.

Claim 28, newly added, also claims an embodiment of the present invention that is not taught, disclosed or suggested by the prior art. Claim 28 specifically recites that the emanator material is located directly below the housing, and that the heating means is located directly below the emanator material and the housing. Such a device is not shown at all in Gentil '929.

Specifically, Gentil '929 relies upon a capillary delivery method to deliver fluid from beneath the tube (a) to the adjacent cylinder (g), which includes a light bulb (h) for heating the cylinder. Thus, the porous pad is utilized to deliver the fluid away from the area directly beneath the tube (a), and to a heating means that is located laterally and away from the bottom of tube (a). Unfortunately, such an approach can have a deleterious effect on the delivery of fluid, as the capillary effect of the porous substance can decrease over time. Furthermore, there is a delay in the initiation of delivery of the fluid due to the period of time taken to migrate fluid from the tube (a) to the cylinder (g).

The present invention does not include the same limitations due to the specific placement of the emanator material and the heating means. Since both are directly beneath the housing, as fluid is delivered into the emanator material it is immediately made available for delivery, and the delivery rate will not vary over time due to decreased capillary effects. This embodiment, therefore, represents an improvement over the conventional device shown in Gentil '929.

Based on the above, Applicant submits that independent Claims 1 and 28 should not be in condition for allowance. Furthermore, Applicant additionally notes that the

remaining claims, namely Claims 24 and 27, all depend from Claim 1, and should therefore also be in condition for allowance. Therefore, reconsideration and passage to allowance of Claims 1, 24 and 27-28 is respectfully requested.

Should anything further be required, a telephone call to the undersigned at (312) 226-1818 is respectfully requested.

Respectfully submitted,

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Dated: July 21, 2003

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Patent Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on July 21, 2003.

Jacob D. Koering

Name of Applicant, assignee, applicant's attorney or Registered Representative

Signature